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EXAMINER	
BAREFORD, KATHERINE A	

ART UNIT	PAPER NUMBER
1762	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/699,915	WORM, JOACHIM	
	Examiner	Art Unit	
	Katherine A. Bareford	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17 and 20-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Claims 18 and 19 are canceled

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *attached*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment of January 31, 2006 has been received and entered.

With the amendment, claims 18-19 are canceled, and claims 1-17 and 20-22 are pending for examination.

Claim Objections

2. The objection to claim 21 because in claim 21, line 1, step "d)" is referred to where the "base material is uncovered when heated" rather than step "f)" is withdrawn due to applicant's amendment of Jan. 31, 2006 to change "d)" to "f)".

3. The objection to claims 20 and 21 under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim is withdrawn due to applicant's amendment of Jan. 31, 2006 to clarify how material is uncovered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 4 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 4 and new claim 22, it is provided that the radical donors "comprise peroxide". However a review of the disclosure as originally filed, provides that in the specification , page 4, line 19 and page 9, line 15, when the use of peroxides is mentioned, there is no indication that the donors "comprise" peroxide. The only teaching is that the donors can be peroxides, such that the donors "consist of peroxides". Thus, the amendments are new matter, as no teaching or suggstion that the donors can be peroxide and another material is provided.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 20 and 21 require that the "base material is uncovered on a top surface by a film when heated", apparently referring lack of a carrier film 11 during the heating

step that occurs after the application of the resin and sand, as described at page 7 of the specification. However, applicant should describe the "film" as "carrier film" as in the specification, as the term "film" can also refer to the applied coating, indicating that the coating is not on the top surface as claimed.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 9, 11, 14, 16, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 496 545 A2 (hereinafter '545) in view of Toth (US 4243696).

Claim 9: '545 teaches a method of continuous production of a glass fiber reinforced resin plate. Figures 5 and 7 and column 1, lines 5-10 and column 2, lines 20-45. The formed plate can be coated with resin materials and filler. Column 2, lines 54-60 and column 6, lines 5-25. The method includes bonding of resin and glass fibers by heating to form a plate like base material. Column 4, lines 20-55. The base material is cooled after initial heating, forming a partially cured (or gelatinized) base material. Figures 5 and 7 and column 4, line 45 through column 5, line 20 (the heated material is removed from the first oven to a spot where the coating occurs, thus cooling will occur

as the material passes through the unheated zone). The surface of the base material which is to be coated is not yet completely hardened. Column 6, lines 10-20. Then a mixture of resin material and filler can be applied to the not yet hardened top surface. Column 2, lines 54-60 and column 6, lines 15-25 and figure 5 (while applicant provides step c) applying the resin onto the top surface and step d) of applying sand on the top surface, as claimed the steps do not have to be performed in that order or separately, and therefore, the application of mixed material would provide the simultaneous performance of steps c) and d)). The applied materials can be rolled by roller 96. Figure 7, column 6, lines 50-55 and column 7, lines 10-25. The coated base material is then heated in an oven to fully cure the material. Column 6, lines 20-40. '545 teaches that well known filler particles can be silica, feldspar or glass bubbles. Column 6, lines 55-60.

Claim 16: the heating at step (f) can be to 240 to 300 degrees F, or 115 to 148 degrees C. Column 5, lines 35-50.

Claim 17: The base material can be initially covered by a film on the surface that is to be coated, and that film can be pulled off from the base material before the coating steps. Figure 1 and column 5, lines 1-10 and column 6, lines 5-15.

'545 teaches all the features of these claims except (1) that the specific filler and particulate materials are sand, (2) that the same type of resin is used in steps (a) and (c) (claim 11), (3) the cool down temperature (claim14), (4) the precise temperature of the heating step (claim 16), (5) that a film is not provided on the top surface during heating (claim 21) and (6) that the applied coating has anti-slip properties (claim 9).

However, Toth teaches that it is desirable to form non-slip coatings on various surfaces. Column 1, lines 5-25. Toth teaches that a surface is provided with an initial base coat of resin. Column 4, lines 30-50. Then a coating that is a mixture of particle and resin is applied to the surface. Column 3, lines 60-68 and column 4, line 60 through column 5, lines 25. The particles can be silica sand, for example. Column 5, lines 15-20. After application the resin particle mixture is heated to cure, and heating can occur in an oven. Column 3, lines 55-68. As shown by Toth, the applied resin/sand mixture can be heated while uncovered. See figures 1C and 1D and column 3, lines 60-65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '545 to (1) use sand as the filler or particulate material with an expectation of desirable coating and product results, because '545 teaches using filler or particulate material, and that such filler or particulate material can be silica, and it is well known that sand is primarily silica material. (2) It would further have been obvious to modify '545 to use the same type of resin in steps (a) and (c) with an expectation of desirable coating and product results, because '545 teaches that the resin of step (a) can be polyester or other resins (column 4, lines 5-15) and that the resin of step (c) can be selected from a variety of compounds (column 2, lines 55-60 and column 6, lines 15-20), and one of ordinary skill in the art would understand that the resins could be either the same of different based on the product desired given the wide ranges taught. (3) It would further have been obvious to perform routine experimentation to optimize '545 to find the optimum cool down temperature at which

the resin/filler coating is applied given the teaching by '545 of using a range of temperatures in the first oven and to control to provide only a partial cure, which would vary based on the resin material used (column 4, lines 30-55). (4) It would further have been obvious to perform routine experimentation to optimize '545 to select the optimum temperature of the curing in the second oven from the range given the teaching by "545. (5) It would further have been obvious to modify '545 to heat the coated base material at step f) while uncovered by a carrier film as suggested by Toth with an expectation of desirable anti-slip results, because '545 teaches heating to cure and Toth teaches that a desirable method to heat to cure for antislip properties is without covering the article with a carrier film. (6) It further would have been obvious to modify '545 to use the resin/particle mixture to apply a coating with anti-slip properties as suggested by Toth with an expectation of providing a desirable coated surface, because '545 teaches a method of providing a desirable resin particle mixture on a surface, and Toth teaches that a resin particle mixture can be applied to a resin coated surface and then cured to provide desirable anti-slip properties on a surface.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over '545 in view of Toth as applied to claims 9, 11, 14, 16, 17 and 21 above, and further in view of Holmes (US 4243719).

'545 in view of Toth teaches all the features of this claim except that the vapors are drawn off.

However, Holmes teaches providing resin/glass laminates. Column 1, lines 1-10. When performing coating with a liquid resin material that is heated and cross linked in an oven to a temperature of 80 to 230 degrees C, Holmes teaches to provide for provision to vent or remove organic vapors thus produced. Column 8, line 25 through column 9, line 25.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '545 in view of Toth to draw off vapors which emerge during the process as suggested by Holmes to provide for removal of toxic fumes, because '545 in view of Toth teaches a process whereby resins are applied and heated, and Holmes teaches that it is well known to remove organic vapors from heated resins in coating processes.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over '545 in view of Toth as applied to claims 9, 11, 14, 16, 17 and 21 above, and further in view of Van Dyck et al (US 3929545).

'545 in view of Toth teaches all the features of this claim except using a cooling fluid to accelerate the cooling down process in step b).

However, Van Dyck teaches a process where a resin is applied to a substrate, then partially cured before further processing occurs in a continuous manufacturing process. Column 2, lines 30-45, column 6, lines 15-20 and column 7, lines 20-25. Van Dyck provides that after partial curing in an oven, the coated sheet can pass out of the

oven and be subject to optional forced air cooling, before further processing occurs. Column 10, lines 35-55.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '545 in view of Toth to use forced air cooling as suggested by Van Dyck so as to provide a desirable and efficient coating process, because '545 in view of Toth teaches a process of partial curing an applied resin material on a base material and then further processing, and Van Dyck teaches that when providing partial curing of an applied resin material on a base material and then further processing it is well known that forced air cooling can be used before the next process steps.

12. Claims 1-2, 4-5, 7-8, 13, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over '545 in view of Toth as applied to claims 9, 11, 14, 16, 17 and 21 above, and further in view of Parker et al (US 3655823).

'545 in view of Toth teaches all the features of this claim except the use of the peroxide radical donors as claimed. As to claim 1, '545 in view of Toth provides applying the mixture of resin and sand at the same time to the top surface, as discussed in the rejection above. The features of claims 2, 5, 7, 8, and 20 are provided as discussed above as with regard to claims 11, 14, 16, 17 and 21, respectively.

However, Parker teaches providing polyester resins that can be used as coatings on items such as flooring. Column 1, lines 10-15 and column 6, lines 5-20. Such resins

are taught as being polymerized and curable by a free-radical mechanism where free radical catalysts are added and the materials heated to polymerize and cure. Column 5, lines 55-70. Conventional free radical catalysts can be used, such as organic peroxides. Column 5, lines 55-65. Parker teaches that the coatings can be applied to a substrate and then the coated article may be cured by adding peroxide to the coating. Column 6, lines 20-30.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '545 in view of Toth to use a peroxide curing agent as suggested by Parker and to apply the curing agent after the coating process at the point of heating so as to provide a desirable curing, because '545 in view of Toth teaches a process whereby resins, such as polyester, are applied and heated to cure, and Parker teaches that when curing polyester resins coated on a substrate, it is well known to use a peroxide curing agent for improved curing and to provide the curing agent after the coating process occurs, and before the curing starts, thus indicating that the curing agent can be added after coating and at any point up to the start of the curing. Since, as discussed in the rejection of claims 9, 11, 14, 16, 17 and 21 above, it would have been obvious to perform the heating and curing without the addition of the carrier film during heating and curing it would have been clear that there would be no problem adding the curing agent after the coating at the point of heating.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over '545 in view of Toth and Parker as applied to claims 1-2, 4-5, 7-8, 13, 20 and 22 above, and further in view of Holmes (US 4243719).

'545 in view of Toth and Parker teaches all the features of this claim except that the vapors are drawn off.

However, Holmes teaches providing resin/glass laminates. Column 1, lines 1-10. When performing coating with a liquid resin material that is heated and cross linked in an oven to a temperature of 80 to 230 degrees C, Holmes teaches to provide for provision to vent or remove organic vapors thus produced. Column 8, line 25 through column 9, line 25.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '545 in view of Toth and Parker to draw off vapors which emerge during the process as suggested by Holmes to provide for removal of toxic fumes, because '545 in view of Toth and Parker teaches a process whereby resins are applied and heated, and Holmes teaches that it is well known to remove organic vapors from heated resins in coating processes.

14. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over '545 in view of Toth and Parker as applied to claims 1-2, 4-5, 7-8, 13, 20 and 22 above, and further in view of Van Dyck et al (US 3929545).

'545 in view of Toth and Parker teaches all the features of this claim except using a cooling fluid to accelerate the cooling down process in step b).

However, Van Dyck teaches a process where a resin is applied to a substrate, then partially cured before further processing occurs in a continuous manufacturing process. Column 2, lines 30-45, column 6, lines 15-20 and column 7, lines 20-25. Van Dyck provides that after partial curing in an oven, the coated sheet can pass out of the oven and be subject to optional forced air cooling, before further processing occurs. Column 10, lines 35-55.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '545 in view of Toth and Parker to use forced air cooling as suggested by Van Dyck so as to provide a desirable and efficient coating process, because '545 in view of Toth and Parker teaches a process of partial curing an applied resin material on a base material and then further processing, and Van Dyck teaches that when providing partial curing of an applied resin material on a base material and then further processing it is well known that forced air cooling can be used before the next process steps.

15. Claims 9-11, 14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benedict et al (US 5681612) in view of Toth (US 4243696).

Claim 9: Benedict teaches a method of continuous production of coated abrasive articles with abrasive particles adhered to polymeric binder that is fiber reinforced.

Column 1, lines 15-30. The fiber reinforced article can be a glass fiber reinforced "plate" like belt. Column 1, lines 15-30, column 16, lines 25-40 and column 28, lines 10-25. The formed plate can be coated with abrasive particles and then resin material. Column 28, lines 15-35 and column 3, lines 1-25 and column 22, lines 15-25 (the size can be a curable resin). The method includes bonding of resin and glass fibers by heating to form a plate like base material. Column 28, lines 10-20 and column 35, lines 1-10. The base material can be cooled after initial heating, forming a partially cured (or gelatinized) base material. Column 35, lines 1-15 (the heated material is removed from the first oven to a spot where the particle coating occurs, thus cooling will occur as the material passes through the unheated zone). The surface of the base material which is to be coated is not yet completely hardened. Column 35, lines 1-15 (particle cured). Then abrasive particles can be applied to the not yet hardened top surface. Column 28, lines 15-25 and column 35, lines 1-25. Then resin size can be applied to the not yet hardened top surface. Column 28, lines 20-30, column 35, lines 1-25 and column 22, lines 15-25. Note that the size can be provided by a roller coater over the particles, which will result in some rolling in of the particles. See column 30, lines 25-40 and figure 13. The coated base material is then heated in an oven to fully cure the material. Column 28, lines 25-35 and column 38, lines 1-25. Benedict teaches that various abrasive materials can be used, including aluminum oxide, silicon carbide, etc. Column 6, lines 55-60. As an abrasive article is formed it will be "anti-slip" in nature due to its roughness. Column 1, lines 15-30.

Claim 10: the sequence of steps can be d) before c) as discussed above as discussed above.

Claim 11: the size resin is desired to be compatible with the binder resin used to form the resin plate and can be the same material column 22, lines 20-30.

Claim 16: the heating at step (f) can be using an oven at about 75-150 degrees C. Column 32, lines 10-25.

Claim 21: the coated base material can be uncovered during heating. Figure 13 and column 30, lines 15-45.

Benedict teaches all the features of these claims except (1) that the specific filler and particulate materials are sand, (2) that step e) follows step c) (claim 10), (3)the cool down temperature (claim14), and (4) the precise temperature of the heating step (claim 16).

However, Toth teaches that it is desirable to form non-slip coatings on various surfaces. Column 1, lines 5-25. Toth teaches that a surface is provided with an initial base coat of resin. Column 4, lines 30-50. Then a coating that is a mixture of particle and resin is applied to the surface. Column 3, lines 60-68 and column 4, line 60 through column 5, lines 25. The particles can be silicon carbide, silica sand, etc. for example. Column 5, lines 15-20. After application the resin particle mixture is heated to cure, and heating can occur in an oven. Column 3, lines 55-68. As shown by Toth, the applied resin/sand mixture can be heated while uncovered. See figures 1C and 1D and column 3, lines 60-65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Benedict to (1) use sand as the filler or particulate material as suggested by Toth with an expectation of desirable coating and product results, because Benedict teaches using particulate material to form a rough abrasive article, and that such filler can be silicon carbide or aluminum oxide, and Toth teaches that a particulate material used to make a resin/particle rough coating would be silicon carbide or silica sand. (2) It would further have been obvious to modify Benedict to provide step e) after step c) with an expectation of desirable coating results, because Benedict teaches that the resin of step c) can be applied by roll coating, and one of ordinary skill in the art would understand that the resin would normally impact the substrate before the roll, due to the thickness of the coating, and thus provide the rolling after the resin application. (3) It would further have been obvious to perform routine experimentation to optimize Benedict to find the optimum cool down temperature at which the resin/filler coating is applied given the teaching by Benedict of using a heated first oven and to control to provide only a partial cure (column 35, lines 1-25), which would vary based on the resin material used. (4) It would further have been obvious to perform routine experimentation to optimize Benedict to select the optimum temperature of the curing in the second oven from the range given in the teaching by Benedict for curing.

16. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benedict in view of Toth as applied to claims 9-11, 14, 16 and 21 above, and further in view of Holmes (US 4243719).

Benedict in view of Toth teaches all the features of this claim except that the vapors are drawn off.

However, Holmes teaches providing resin/glass laminates. Column 1, lines 1-10. When performing coating with a liquid resin material that is heated and cross linked in an oven to a temperature of 80 to 230 degrees C, Holmes teaches to provide for provision to vent or remove organic vapors thus produced. Column 8, line 25 through column 9, line 25.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Benedict in view of Toth to draw off vapors which emerge during the process as suggested by Holmes to provide for removal of toxic fumes, because Benedict in view of Toth teaches a process whereby resins are applied and heated, and Holmes teaches that it is well known to remove organic vapors from heated resins in coating processes.

17. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benedict in view of Toth as applied to claims 9-11, 14, 16 and 21 above, and further in view of Van Dyck et al (US 3929545).

Benedict in view of Toth teaches all the features of this claim except using a cooling fluid to accelerate the cooling down process in step b).

However, Van Dyck teaches a process where a resin is applied to a substrate, then partially cured before further processing occurs in a continuous manufacturing process. Column 2, lines 30-45, column 6, lines 15-20 and column 7, lines 20-25. Van Dyck provides that after partial curing in an oven, the coated sheet can pass out of the oven and be subject to optional forced air cooling, before further processing occurs. Column 10, lines 35-55.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Benedict in view of Toth to use forced air cooling as suggested by Van Dyck so as to provide a desirable and efficient coating process, because Benedict in view of Toth teaches a process of partial curing an applied resin material on a base material and then further processing, and Van Dyck teaches that when providing partial curing of an applied resin material on a base material and then further processing it is well known that forced air cooling can be used before the next process steps.

18. Claims 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benedict in view of Toth as applied to claims 9-11, 14, 16 and 21 above, and further in view of Parker et al (US 3655823).

Benedict in view of Toth teaches all the features of this claim except the use of the peroxide radical donors as claimed. Benedict does teach that the thermosetting resins from which the binder can be prepared includes polyester resins and that the size resin can be the same as the binder resin. Column 10, lines 10-15 and column 22, lines 15-30.

However, Parker teaches providing polyester resins that can be used as coatings on items such as flooring. Column 1, lines 10-15 and column 6, lines 5-20. Such resins are taught as being polymerized and curable by a free-radical mechanism where free radical catalysts are added and the materials heated to polymerize and cure. Column 5, lines 55-70. Conventional free radical catalysts can be used, such as organic peroxides. Column 5, lines 55-65. Parker teaches that the coatings can be applied to a substrate and then the coated article may be cured by adding peroxide to the coating. Column 6, lines 20-30.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Benedict in view of Toth to use a peroxide curing agent as suggested by Parker and to apply the curing agent after the coating process at the point of heating so as to provide a desirable curing, because Benedict in view of Toth teaches a process whereby resins, such as polyester, are applied and heated to cure, and Parker teaches that when curing polyester resins coated on a substrate, it is well known to use a peroxide curing agent for improved curing and to provide the curing agent after the coating process occurs, and before the curing starts, thus indicating that the curing agent can be added after coating and at any point up to the start of the curing.

19. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benedict in view of Toth as applied to claims 9-11, 14, 16 and 21 above, and further in view of EP 0 496 545 A2 (hereinafter '545).

Benedict in view of Toth teaches all the features of this claim except using a using a film on the substrate during step b) and removing it before steps d) and c).

However, '545 teaches a method of continuous production of a glass fiber reinforced resin plate. Figures 5 and 7 and column 1, lines 5-10 and column 2, lines 20-45. The plate can be coated with resin materials and filler. Column 2, lines 54-60 and column 3, lines 5-10 and column 7, lines 15-25. The method includes bonding of resin and glass fibers by heating to form a plate like base material. Column 4, lines 20-55. The base material is cooled after initial heating, forming a partially cured (or gelatinized) base material. Figures 5 and 7 and column 4, line 45 through column 5, line 20 (the heated material is removed from the first oven to a spot where the coating occurs, thus cooling will occur as the material passes through the unheated zone). The surface of the base material which is to be coated is not yet completely hardened. Column 6, lines 10-20. Then a resin material can be applied to the not yet hardened top surface. Column 2, lines 54-60 and column 6, lines 15-25. ~~Then~~ Also particles, such as silica, can be applied to the not yet hardened surface. Column 7, lines 15-25 and column 6, lines 40-60. The applied particles can be rolled into the curable layer. Figure 7 and column 6, lines 50-55. The coated base material is then heated in an oven to fully cure the material. Column 7, lines

1-15. The base material can be initially covered by a film on the surface that is to be coated, and that film can be pulled off from the base material before the coating steps. Figure 1 and column 5, lines 1-10 and column 6, lines 5-15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Benedict in view of Toth to use a film on the resin/reinforcing material during the initial curing and cooling of step b) so as to provide a desirable base reinforcing material/resin, because Benedict in view of Toth teaches a process of partial curing an applied resin material on a base reinforcing material and then further coating processing, and '545 teaches that when forming a resin/reinforcing material to be further coated and processed, it is known to provide the initial curing/cooling of the material while it is covered with a carrier film.

20. The rejection of claims 9-11, 14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 496 545 A2 (hereinafter '545) in view of Miller, Jr. et al (US 4689259) is withdrawn due to applicant's arguments in the amendment of Jan. 31, 2006.

Response to Arguments

21. Applicant's arguments with respect to claims 1-17 and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

As to the arguments as to the obviousness of combining '545 and Toth, it remains the Examiner's position that the combination of '545 and Toth indicates the desirability

of providing the anti-slip features on products such as those suggested by '545 as discussed in paragraph 17 of the October 31, 2005 Office Action. As to the argument that the combination of '545 and Toth would lead to the removal of the sand/resin mixture of Toth with only sand being applied, the Examiner disagrees. The primer coat of Toth would equate to the uncured resin base of '545, and Toth suggest that a mixture of resin/sand is to be applied over that. It is noted that in Toth the resin/sand mixture is much thicker than the primer layer (column 4, lines 25-30 and 45-50) and such a thickness differential is not prevented by '545. At the very least, when the second coating is thicker than the first layer, as shown by Toth, it would be clear that the sand/resin mixture would be applied as the top layer to maintain the desired resin/sand ratio in the top layer. As to Van Dyck, the Examiner notes that this reference makes clear the known use of forced air cooling. As to Holmes, the Examiner notes that this reference makes clear the known desire to remove organic vapors.

Parker has been added as to the peroxide curing agent.

The rejection using '545 and Toth has also been provided to claims 9+ after a further review of the requirements of that claim.

The rejection of Benedict and Toth has also been provided as to claims 9+. The Examiner notes that Benedict was cited in the Office Action of March 15, 2005.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:00-3:30) with the First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER